

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

1-18. (Canceled).

19. (Currently Amended) A storage system, comprising:

a controller, ~~being~~ coupled to at least one ~~of a plurality of~~ host computers, and ~~controlling-transferring of~~ data sent from said host computer to a plurality of storage regions;

at least one data line being coupled to said controller and having-being used to relay data from/to said controller based on a serial interface which is a different type different from a Serial Advanced Technology Attachment (SATA) interface and coupled to said controller, said data line being used to relay data from/to said controller;

~~a plurality of converters, coupled to said data line, and converting between said serial interface and said SATA interface;~~

a plurality of SATA disk drives having some of said storage regions and each of said SATA disk drives having said serial interface and ~~one of said a~~ converters built in, said converter being coupled to said data line and converting between said serial interface and said SATA interface; and

a plurality of another type of disk drives having some of said storage regions and each of said another type of disk drives having said serial interface, said another type of disk drives being of a different type from said SATA disk drives;

a plurality of first disk drive units being coupled to said data line and each of said first disk drive units having one of said SATA disk drives ~~and said serial interface; and~~

a plurality of second disk drive units each having one of said another type of disk drives.

20. (Previously Presented) A storage system according to claim 19, wherein said serial interface is a Fibre Channel (FC) interface.

21. (Canceled)

22. (Currently Amended) A storage system according to claim 19, ~~further comprising:~~

~~a plurality of Fibre Channel (FC) disk drives having some of said storage regions and each of said FC disk drives having a FC interface and each of said FC disk drives not having one of said converters; and~~

~~a plurality of second disk drive units each having one of said FC disk drives,~~
wherein said serial interface is a Fibre Channel (FC) interface, and

said another type of disk drives do not have said converter.

23. (Currently Amended) A storage system according to claim 19, further comprising:

~~a FC disk drive having some of said storage regions and said FC disk drive having a FC interface and said FC disk drives having none of said converters; and a second disk drive unit coupled to said data line and said second disk drive unit having said FC disk drive and said FC interface,~~

wherein said data line is a Fibre Channel Arbitrated Loop (FC-AL), and each of said another type of disk drives does not have said converter.

24. (Currently Amended) A storage system according to claim 19, further comprising:

~~a plurality of FC disk drives having some of said storage regions and each of said FC disk drives having a FC interface and each of said FC disk drives having none of said converters;~~

~~a plurality of second disk drive units each having one of said FC disk drives;~~

a housing having said first disk drive units and said second disk drive units;

and

a rack having said housing and ~~an another housing, said rack in which~~ wherein said housing and said another housing are stacked in said rack;

wherein said serial interface is a Fibre Channel (FC) interface, and
each of said another type of disk drives does not have said converter..

25. (Currently Amended) A storage system according to claim 19, further comprising:

~~a plurality of another type disk drives having some of said storage regions and~~
~~each of said another type disk drives having said serial interface and each of said~~
~~another type disk drives having none of said converters;~~

~~a plurality of second disk drive units each having one of said another type disk~~
~~drives;~~

a plurality of housings having a first housing and a second housing, said first housing having said first disk drive units, and said second housing having said second disk drive units; and

a rack having said housings, wherein ~~and said rack in which~~ said first housing and said second housing are stacked in said rack;

wherein said another type of disk drives do not have said converter..

26. (Previously Presented) A storage system according to claim 19, wherein said data line is a Fibre Channel Arbitrated Loop (FC-AL).

27-28. (Canceled).

29. (Previously Presented) A storage system according to claim 19, further comprising:

a power supply coupled to said first disk drive units by at least one of power lines and supplying power to said first disk drive units; and

a power controller coupled to said power supply and controlling to supply power to said first disk drive units,

wherein at least one of said first disk drive units relays a control signal sent from said controller to said power controller.

30. (Currently Amended) A storage system according to claim 19, further comprising:

~~a plurality of FC disk drives having some of said storage regions and each of said FC disk drives having a FC interface and each of said FC disk drives having none of said converters;~~

~~a plurality of second disk drive units each having one of said FC disk drives;~~
and

wherein said serial interface is a Fibre Channel (FC) interface,

wherein each of said another type of disk drives does not have said converter.

wherein ~~one or more~~some storage regions of said SATA disk drives form a first logical unit, said first logical unit is an object to store data sent from said host computers which is coupled to said controller,

wherein ~~some one or more~~storage regions of said FC disk drives form a second logical unit; and

wherein each of said first logical unit and said second logical unit has a logical unit number.

31. (Previously Presented) A storage system according to claim 19, wherein some of said SATA disk drives are used to store data, the data are used to back up.

32. (Currently Amended) A storage system, comprising:
a controller, coupled to at least one of a plurality of information processing devices, and ~~controlling-transferring~~of data sent from said information processing device to a plurality of storage regions;
~~a at least one data line being coupled to said controller and having being used to relay data from/to said controller according to a Fibre Channel (FC) interface and coupled to said controller and being used to relay data from/to said controller;~~
~~a plurality of converters coupled to said data line and converting between said FC interface and said Serial Advanced Technology Attachment (SATA) interface;~~

a plurality of Serial Advanced Technology Attachment (SATA) disk drives
~~having some of said storage regions and each of said SATA disk drives being bolted~~
~~to said FC interface and each of said SATA disk drives having one of said a~~
~~converters built-in, said converter converting between a first protocol of said FC~~
~~interface and a second protocol of said SATA interface;~~

a plurality of FC disk drives each having said FC interface; and

a plurality of first disk drive units being coupled to said data line and each of
said first disk drive units having one of said SATA disk drives ~~and said FC interface;~~
and

a plurality of second disk drive units each having one of said FC disk drives.

33. (Currently Amended) A storage system, comprising:

a controller, coupled to at least one ~~of~~ information processing devices, and
~~controlling-transferring of~~ data sent from said information processing devices to a
plurality of storage regions;

a at least one data line being coupled to said controller and having being used
to relay data from/to said controller by a Fibre Channel (FC) interface and coupled to
~~said controller and being used to relay data from/to said controller;~~

~~a plurality of converters coupled to said data line and converting between said~~
~~FC interface and a Serial Advanced Technology Attachment (SATA) interface;~~

a plurality of SATA first type disk drives having some of said storage regions and each of said SATA-first type disk drives receiving data via said FC interface and ~~having said FC interface and each of said SATA disk drives having installed therein one of said~~ a converters, said converter converting between a first protocol of said FC interface and a second protocol of a Serial Advanced Technology Attachment (SATA) interface; and

a plurality of SATA-first type disk drive units coupled to said data line and each of said SATA-first type disk drive units having one of said SATA-first type disk drives ~~and said FC interface;~~

a plurality of second type disk drives having some of said storage regions and each of said second type disk drives receiving data via said FC interface and not having said converter; and

a plurality of second type disk drive units each having one of said second type disk drives.

34. (Currently Amended) A storage system, comprising:

a controller, coupled to at least one ~~of~~ information processing devices, and ~~controlling transfer of~~ storing data sent from said information processing devices ~~to~~ in a plurality of storage regions;

a at least one data line being coupled to said controller and being used to relay data from/to said controller ~~having by~~ a serial interface which is ~~of a type~~

different type from a Serial Advanced Technology Attachment (SATA) interface ~~and coupled to said controller and being used to relay data from/to said controller;~~

~~a plurality of converters, coupled to said data line, and converting between said serial interface and said SATA interface;~~

a plurality of SATA disk drives having some of said storage regions and each of said SATA disk drives receiving data via said serial interface and having said serial interface ~~and one of said a converters built-in, said converter converting between said serial interface and said SATA interface; and~~

a plurality of first disk drive units coupled to said data line and each of said first disk drive units having one of said SATA disk drives ~~and each of said first disk drive units having said serial interface;~~

a plurality of another type of disk drives each receiving data via said serial interface and not having said converter; and

a plurality of second disk drive units each having one of said another type of disk drives.

35. (Currently Amended) A storage system, comprising:

a controller, coupled to at least one of information processing devices, and controlling to transferring data sent from said information processing devices to a plurality of storage regions;

~~a at least one data line being coupled to said controller and being used to relay data from said controller to said storage regions by having a Fibre Channel (FC) interface and coupled to said controller and being used to relay data from/to said controller;~~

~~a plurality of converters coupled to said data line and converting between said FC interface and an Advanced Technology Attachment (ATA) interface;~~

a plurality of ATA first type disk drives having some of said storage regions and each of said ATA first type disk drives having said FC interface and each of said ATA first type disk drives having installed therein ~~one of said a~~ converters, said converter converting between said FC interface and an Advanced Technology Attachment (ATA) interface; and

a plurality of ATA first type disk drive units coupled to said data line and each of said ATA first type disk drive units having one of said ATA first type disk drives ~~and said FC interface;~~

a plurality of second type disk drives having some of said storage regions and each of said second type disk drives having said FC interface, said another type of disk drives being different type from said first type disk drives;

a plurality of second type disk drive units each having one of said second type disk drives.

36. (New) A storage system according to claim 33 wherein:

each of said first type disk drives is a first type FC disk drive, and
each of said second type disk drives is a second type FC disk drive.

37. (New) A storage system according to claim 33 wherein:
said data line is a Fibre Channel Arbitrated Loop (FC-AL).

38. (New) A storage system according to claim 33, further comprising:
a housing having said first type disk drive units and said second type disk
drive units; and

a rack having said housing and another housing, wherein said housing and
said another housing are stacked in said rack.

39. (New) A storage system according to claim 33, further comprising:
a plurality of housings having a first housing and a second housing, said first
housing having said first type disk drive units, and said second housing having said
second type disk drive units; and

a rack having said housings, wherein said first housing and said second
housing are stacked in said rack.

40. (New) A storage system according to claim 33, further comprising:

a power supply coupled to said first type disk drive units by at least one power line and supplying power to said first type disk drive units; and

a power controller coupled to said power supply and controlling to supply power to said first type disk drive units,

wherein at least one of said first type disk drive units relays a control signal sent from said controller to said power controller.

41. (New) A storage system according to claim 33 wherein:

one or more storage regions of said first type disk drives form a first logical unit, said first logical unit is an object to store data sent from said information processing device which is coupled to said controller,

one or more storage regions of said second type disk drives form a second logical unit; and

each of said first logical unit and said second logical unit has a logical unit number.

42. (New) A storage system according to claim 33, wherein:

some of said first type disk drives are used to store data, the data are used to back up.

43. (New) A storage system, comprising:

a controller, coupled to at least one information processing device, and
transferring data sent from said information processing devices;

at least one line being coupled to said controller and being used to relay data
from/to said controller by a Fibre Channel (FC) interface;

a plurality of first type disk drives storing data sent from said controller,
wherein each of said first type disk drives can interpret a first protocol of said FC
interface and a second protocol of a serial interface, which is different type from said
FC interface;

a plurality of first type disk drive units coupled to said line, wherein each of
said first type disk drive units having one of said first type disk drives;

a plurality of second type disk drives storing data sent from said controller,
wherein each of said second type disk drives can interpret said first protocol and
does not interpret said second protocol; and

a plurality of second type disk drive units each having one of said second type
disk drives.

44. (New) A storage system according to claim 43 wherein:

each of said first type disk drives is a first type FC disk drive, and
each of said second type disk drives is a second type FC disk drive.

45. (New) A storage system according to claim 43 wherein:

said line is a Fibre Channel Arbitrated Loop (FC-AL).

46. (New) A storage system according to claim 43, further comprising:
a housing having said first type disk drive units and said second type disk drive units; and
a rack having said housing and another housing, wherein said housing and said another housing are stacked in said rack.

47. (New) A storage system according to claim 43, further comprising:
a plurality of housings having a first housing and a second housing, said first housing having said first type disk drive units, and said second housing having said second type disk drive units; and
a rack having said housings, wherein said first housing and said second housing are stacked in said rack.

48. (New) A storage system according to claim 43, further comprising:
a power supply coupled to said first type disk drive units by at least one power line and supplying power to said first type disk drive units; and
a power controller coupled to said power supply and controlling to supply power to said first type disk drive units,

wherein at least one of said first type disk drive units relays a control signal sent from said controller to said power controller.

49. (New) A storage system according to claim 43 wherein:

one or more storage regions of said first type disk drives form a first logical unit, said first logical unit is an object to store data sent from said information processing device which is coupled to said controller,

one or more storage regions of said second type disk drives form a second logical unit; and

each of said first logical unit and said second logical unit has a logical unit number.

50. (New) A storage system according to claim 43, wherein:

some of said first type disk drives are used to store data, the data are used to back up.